(11) **EP 2 366 473 A3**

(12)

EUROPEAN PATENT APPLICATION

(88) Date of publication A3: 23.01.2013 Bulletin 2013/04

(51) Int Cl.: **B21D** 53/26 (2006.01) **B21K** 1/42 (2006.01)

B21H 1/04 (2006.01)

(43) Date of publication A2: 21.09.2011 Bulletin 2011/38

(21) Application number: 11158575.8

(22) Date of filing: 16.03.2011

(84) Designated Contracting States:

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated Extension States:

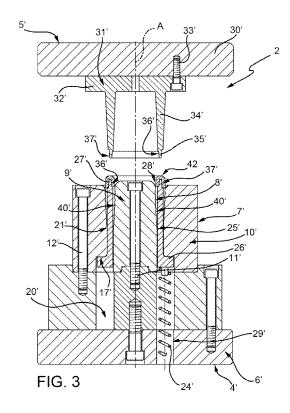
BA ME

(30) Priority: 16.03.2010 IT TO20100203

- (71) Applicant: Agla Power Transmission S.p.a. Avigliana (IT)
- (72) Inventor: Bonù, Oscar 10051 Avigliana (IT)
- (74) Representative: Jorio, Paolo et al Studio Torta S.p.A.Via Viotti, 9 10121 Torino (IT)

(54) Method and device for producing a pulley for motor vehicle applications

- (57) The invention relates to a method for producing a pulley (3) for motor vehicle applications, starting from a perforated flat disc (41) and comprising the steps of:
- providing a first and a second mould (1,2) each comprising a fixed annular forming cavity (8,8') and a mobile annular punch (31,31');
- arranging the starting flat disc (41) resting it on a flat head surface (27) of a flat annular blank holder element (25);
- coupling the punch (31) of the first mould (1) with the respective forming cavity (8) by pressing the flat disc (41) between the first blank holder element (25) and a shaped head portion (35) of the punch (31) itself so as to obtain a U-section annular element (42);
- arranging the annular element (42) to engage a head portion (27') having a complementary shape of a second mobile annular blank holder element (25'); and
- coupling the punch (31') of the second mould (2) with the respective forming cavity (8') so as to obtain an H section pulley (3). A device suitable for carrying out the method is also disclosed.





EUROPEAN SEARCH REPORT

Application Number EP 11 15 8575

	DOCUMENTS CONSID	ERED TO B	E RELEVAN	NT.		
Category	Citation of document with in of relevant pass		appropriate,		Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
A	JP 2008 264821 A (A 6 November 2008 (20 * figures 1-14 *		0)		1-12	INV. B21D53/26 B21H1/04 B21K1/42
A	US 2007/125147 A1 (7 June 2007 (2007-6) * figures 1a-1f,2,3	06-07)	YA [US])		1-12	BZ1K1/ 42
A	US 5 941 113 A (KAN AL) 24 August 1999 * figures 1-7 *] ET :	1-12	
						TECHNICAL FIELDS SEARCHED (IPC) B21D B21H F16H B21K
	The present search report has					
	Place of search		completion of the sea			Examiner
	Munich	19	December 2	2012	Vir	nci, Vincenzo
X : part Y : part docu A : tech O : non	ATEGORY OF CITED DOCUMENTS icularly relevant if taken alone icularly relevant if combined with anot iment of the same category nological background written disclosure mediate document		E : earlier pat after the fil D : document L : document	tent docur ling date t cited in the cited for the of the sam		invention shed on, or ,, corresponding

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 11 15 8575

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

19-12-2012

cit	Patent document ed in search report		Publication date		Patent family member(s)		Publication date
JP	2008264821	A	06-11-2008	NONE			
US	2007125147	A1	07-06-2007	US WO	2007125147 2007067303		07-06-20 14-06-20
US	5941113	Α	24-08-1999	DE GB JP US WO	19681588 2319975 3010191 5941113 9805447	A B2 A	20-08-19 10-06-19 14-02-20 24-08-19 12-02-19
				WO 	9805447	A1 	12-02-19

 $\stackrel{
m O}{\stackrel{}{\scriptscriptstyle \sqcup}}$ For more details about this annex : see Official Journal of the European Patent Office, No. 12/82